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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/522,848

09/20/2005

Sang-Soo Kim

AB-1410 US

9371

32605

7590

05/19/2009

Haynes and Boone, LLP

IP Section

2323 Victory Avenue

SUITE 700

Dallas, TX 75219

EXAMINER

WEISS, HOWARD

ART UNIT

PAPER NUMBER

2814

MAIL DATE

DELIVERY MODE

05/19/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/522,848	Applicant(s) KIM ET AL.	
	Examiner HOWARD WEISS	Art Unit 2814	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 March 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,5,7 and 9-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,5,7 and 9-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>12/30/2008</u> | 6) <input type="checkbox"/> Other: _____ |

Attorney's Docket Number: AB-1410 US

Filing Date: 9/20/2005

Continuing Data: #&! of PCT/KR02/01763 (9/18/2002)

Claimed Foreign Priority Date: 8/1/2002 (KRX)

Applicant(s): Kim et al. (Kim)

Examiner: Howard Weiss

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Initially, and with respect to Claims 9, 10, 12 and 13, note that a "product by process" claim is directed to the product per se, no matter how actually made. See *In re Thorpe et al.*, 227 USPQ 964 (CAFC, 1985) and the related case law cited therein which make it clear that it is the final product per se which must be determined in a "product by process" claim, and not the patentability of the process, and that, as here, an old or obvious product produced by a new method is not patentable as a product, whether claimed in "product by process" claims or not. As stated in Thorpe,

even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. *In re Brown*, 459 F.2d 531, 535, 173 USPQ 685, 688 (CCPA 1972); *In re Pilkington*, 411 F.2d 1345, 1348, 162 USPQ 145, 147 (CCPA 1969); *Buono v. Yankee Maid Dress Corp.*, 77 F.2d 274, 279, 26 USPQ 57, 61 (2d. Cir. 1935).

Note that Applicant has burden of proof in such cases as the above case law makes clear.

3. Claims 1, 2, 5, 9, 10, 12 to 14 and 17 to 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Holmberg et al. (U.S. Patent No. 5,668,032) and Kim (U.S. Patent No. 6,861,665).

Holmberg et al. show most aspects of the instant invention (e.g. Figures 1 to 5) including:

- an insulating substrate **32**
- a gate wire including gate lines **34**, gate electrodes **58** and gate pads, said gate lines being the second signal line having a first portion going in a transverse direction and a portion going in a longitudinal direction
- a storage electrode wire **72** including storage electrode lines **34** and electrodes **78**
- a gate insulating layer **62** and a semiconductor layer **64** on said gate insulating layer
- a data wire including data lines **62**, source **74** and drain **76** electrodes and data pads **88**
- a passivation layer **82** formed on said data wire and pixel electrodes **90** formed on said passivation layer
- an active area comprising pixels **42**
- a peripheral area comprising first **22** and second **26** common bars electrically connected to the storage pads and formed in opposite sides of said active area
- first **C1,C3,C5** and second **C2,C4** signal lines connected to first **24** and second **28** common bars and extending in a first direction
- third signal lines **R1,R2,R3** (Figure 1) extending in a second direction perpendicular to the first direction

Holmberg et al. do not show the width of the first common bar having a width less than the width of the second common bar. Kim teaches (e.g. Column 3 Lines 32 to 36) that the resistance of the common (i.e. shorting) bar is dependent upon its width, the wider the bar the lower the resistance. Holmberg et al. teach to adjust the

resistance of the common bars to provide ESD protection and allow testing during manufacturing (Column 6 Lines 48 to 60). Therefore one of ordinary skill in the art would have the common bars of different widths to provide ESD protection and allow testing during manufacturing as taught by Kim and Holmberg et al.

As to the grounds of rejection under "product by process", when the storage electrode wire and the gate wire are formed, either simultaneously or separately, pertains to intermediate process steps which do not affect the final device structure. See MPEP § 2113 which discusses the handling of "product by process" claims.

4. Claims 7, 16 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Holmberg et al. and Kim, as applied to claims 1,2 and 5 above, and further in view of Nakamura et al. (U.S. Patent No. 6,621,537).

Holmberg et al. and Kim show most aspects of the instant invention (Paragraph 3) except for the ends of the second signal lines connected to both common bars and having a width equal to or less than 150 microns. Nakamura et al. teach (e.g. Figure 6) to connect signal lines **12a,b** to both common bars **13a,b** to prevent corrosion and disconnection of the storage capacitance wiring (Column 3 Lines 56 to 62).

Response to Arguments

5. Applicant's arguments with respect to Claims 1, 2, 5, 7 and 9 to 20 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

7. Papers related to this application may be submitted directly to Art Unit 2814 by facsimile transmission. The faxing of such papers must conform with the notice published in the Official Gazette, 1096 OG 30 (15 November 1989). The Art Unit 2814 Fax Center number is **(571) 273-8300**. The Art Unit 2814 Fax Center is to be used only for papers related to Art Unit 2814 applications.
8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Howard Weiss at **(571) 272-1720** and between the hours of 7:00 AM to 3:00 PM (Eastern Standard Time) Monday through Friday or by e-mail via Howard.Weiss@uspto.gov. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wael Fahmy, can be reached on **(571) 272-1705**.
9. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at **866-217-9197** (toll-free).

10. The following list is the Examiner's field of search for the present Office Action:

Field of Search	Date
U.S. Class / Subclass(es): 257/ 59, E21.703	Thru 5/15/2009
Other Documentation: none	
Electronic Database(s): EAST	Thru 5/15/2009

HW/hw
19 May 2009

/Howard Weiss/
Primary Examiner
Art Unit 2814